

Title (en)
CHIMERIC RECEPTOR POLYPEPTIDES IN COMBINATION WITH TRANS METABOLISM MOLECULES MODULATING INTRACELLULAR LACTATE CONCENTRATIONS AND THERAPEUTIC USES THEREOF

Title (de)
CHIMÄRE REZEPTOR-POLYPEPTIDE IN KOMBINATION MIT TRANSMETABOLISCHEN MOLEKÜLEN, DIE INTRAZELLULÄRE LAKTATKONZENTRATIONEN MODULIEREN, UND THERAPEUTISCHE VERWENDUNGEN DAVON

Title (fr)
POLYPEPTIDES RÉCÉPTEURS CHIMÉRIQUES EN ASSOCIATION AVEC DES MOLÉCULES MÉTABOLIQUES TRANS MODULANT DES CONCENTRATIONS INTRACELLULAIRES EN LACTATE ET UTILISATIONS THÉRAPEUTIQUES ASSOCIÉES

Publication
EP 3847260 A4 20220907 (EN)

Application
EP 19857632 A 20190906

Priority
• US 201862728306 P 20180907
• US 201862728338 P 20180907
• US 2019050013 W 20190906

Abstract (en)
[origin: WO2020051493A1] Disclosed herein are genetically engineered hematopoietic cells, which express one or more lactate-modulating factors (e.g., polypeptides), and optionally a chimeric receptor polypeptide (e.g., an antibody-coupled T cell receptor (ACTR) polypeptide or a chimeric antigen receptor (CAR) polypeptide) capable of binding to a target antigen of interest. Also disclosed herein are uses of the engineered hematopoietic cells for inhibiting cells expressing a target antigen in a subject in need thereof.

IPC 8 full level
C12N 15/52 (2006.01); **C12N 15/62** (2006.01); **C12N 15/63** (2006.01)

CPC (source: EP IL KR US)
A61K 35/17 (2013.01 - US); **A61K 38/1709** (2013.01 - US); **A61K 38/177** (2013.01 - US); **A61K 38/1774** (2013.01 - US); **A61K 38/179** (2013.01 - US); **A61K 39/39558** (2013.01 - US); **A61K 39/4611** (2023.05 - EP IL KR); **A61K 39/4631** (2023.05 - EP IL KR); **A61K 39/4632** (2023.05 - EP IL KR); **A61K 39/464474** (2023.05 - EP IL KR); **A61P 35/00** (2018.01 - KR US); **C07K 14/4702** (2013.01 - US); **C07K 14/705** (2013.01 - EP IL); **C07K 14/7051** (2013.01 - EP IL KR US); **C07K 14/70517** (2013.01 - US); **C07K 14/70521** (2013.01 - KR US); **C07K 14/70535** (2013.01 - US); **C07K 14/70578** (2013.01 - KR US); **C07K 14/71** (2013.01 - US); **C07K 16/303** (2013.01 - KR US); **C12N 5/0636** (2013.01 - EP IL KR US); **C12N 5/0646** (2013.01 - EP IL KR); **C12N 7/00** (2013.01 - US); **C12N 9/0006** (2013.01 - KR); **C12N 9/12** (2013.01 - KR); **C12N 15/86** (2013.01 - US); **C12Y 101/01027** (2013.01 - EP IL KR); **C12Y 207/11002** (2013.01 - EP IL KR); **A61K 2039/505** (2013.01 - US); **A61K 2039/5156** (2013.01 - US); **A61K 2039/5158** (2013.01 - US); **A61K 2239/59** (2023.05 - EP IL KR); **C07K 2317/53** (2013.01 - US); **C07K 2317/569** (2013.01 - US); **C07K 2317/622** (2013.01 - KR US); **C07K 2319/02** (2013.01 - KR US); **C07K 2319/03** (2013.01 - EP IL KR US); **C07K 2319/30** (2013.01 - KR US); **C07K 2319/33** (2013.01 - US); **C12N 2500/34** (2013.01 - EP IL); **C12N 2501/51** (2013.01 - EP IL); **C12N 2501/515** (2013.01 - EP IL); **C12N 2501/52** (2013.01 - EP IL); **C12N 2510/00** (2013.01 - EP IL KR US); **C12N 2740/15043** (2013.01 - US)

Citation (search report)
• [X] WO 2018106595 A1 20180614 - FATE THERAPEUTICS INC [US]
• [X] WO 2015188119 A1 20151210 - BLUEBIRD BIO INC [US]
• [Y] WO 2012092379 A2 20120705 - SIGMA ALDRICH CO LLC [US], et al
• [Y] WO 2018014038 A1 20180118 - POSEIDA THERAPEUTICS INC [US], et al
• [Y] WANG YING-HUA ET AL: "Cell-State-Specific Metabolic Dependency in Hematopoiesis and Leukemogenesis", CELL, ELSEVIER, AMSTERDAM NL, vol. 158, no. 6, 11 September 2014 (2014-09-11), pages 1309 - 1323, XP029055515, ISSN: 0092-8674, DOI: 10.1016/J.CELL.2014.07.048
• [Y] YUAN WEIPING: "PDK1 Regulates HSCs Via the Foxo Pathway during Murine Fetal Liver Hematopoiesis", BLOOD, AMERICAN SOCIETY OF HEMATOLOGY, US, vol. 130, 8 December 2017 (2017-12-08), pages 1135, XP086634521, ISSN: 0006-4971, DOI: 10.1182/BLOOD.V130.SUPPL_1.1135.1135
• [Y] RACHEL L DABERKOW ET AL: "Monocarboxylate Transporter 1 Mediates Biotin Uptake in Human Peripheral Blood Mononuclear Cells 1", THE JOURNAL OF NUTRITION, vol. 133, no. 9, 1 September 2003 (2003-09-01), pages 2703 - 2706, XP055692045, DOI: 10.1093/jn/133.9.2703
• [Y] K. KUDO ET AL: "T Lymphocytes Expressing a CD16 Signaling Receptor Exert Antibody-Dependent Cancer Cell Killing", CANCER RESEARCH, vol. 74, no. 1, 1 January 2014 (2014-01-01), US, pages 93 - 103, XP055222596, ISSN: 0008-5472, DOI: 10.1158/0008-5472.CAN-13-1365
• See also references of WO 2020051493A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2020051493 A1 20200312; AU 2019336229 A1 20210318; CA 3111706 A1 20200312; CN 112888786 A 20210601; EP 3847260 A1 20210714; EP 3847260 A4 20220907; IL 281294 A 20210429; JP 2021536265 A 20211227; KR 20210056377 A 20210518; US 2021340219 A1 20211104

DOCDB simple family (application)
US 2019050013 W 20190906; AU 2019336229 A 20190906; CA 3111706 A 20190906; CN 201980067513 A 20190906; EP 19857632 A 20190906; IL 28129421 A 20210307; JP 2021512773 A 20190906; KR 20217009807 A 20190906; US 201917274021 A 20190906